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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, ALAN V

ART UNIT PAPER NUMBER

2662

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/727,189

Applicant(s)

OLIVEIRA, FERNANDO DE

Examiner

Alan Nguyen

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 21-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 10 May 2004 under 37 CFR 1.131 has been considered but is ineffective to overcome the reference.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10, 14-16, 21, 22, 24, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Maggenti (US 6,633,765).

Regarding **claims 1, 14, 21, and 24** Maggenti discloses a radio telecommunications network (**figure 3**), a method and apparatus of updating radio network data (**"a method and apparatus for providing coverage control for multicast service in a wireless network"**, column 3, lines 15-17) in a plurality of devices deployed in a Base Station (BS) (**element 104**) in the network, with the method comprising the steps of:

interfacing the BS with a Mobile Switching Center (MSC) (**element 102**) through an Internet Protocol (IP) packet data network (**column 8, lines 39-48 discloses the**

use of IP multicast through a router 300 of figure 3 interfaced between the MSC 102 and BS 104);

assigning the BS an IP address (column 8, lines 7-12 discloses during data communication, end devices are in a data network are assigned an IP address for communication with base station 104 and MSC 102. Column 8, lines 56-61 discloses the MSC receives the IP multicast information from data network 118 and then forwards the multicast to base station 104. The BS must have an IP address to receive the information from the MSC);

sending device update data from the MSC to the BS in an IP message (column 8, lines 56-61 discloses the MSC receives the IP multicast information from data network 118 and then forwards the multicast to base station 104. IP multicast information is an IP message. The embodiment cites using the IP multicast for a sports scores updates; col 4 lines 46-66); and

simultaneously updating the plurality of devices by the BS from the IP message sent by the MSC (column 8, lines 56-61 discloses that after the base station 104 receives the IP multicast from the MSC it forwards the data to all wireless communication devices).

Further regarding claim 14, Maggenti discloses the use of a plurality of BSs in a network (“one or more base stations, 104 and 106”, column 3, lines 44-45 and shown in figure 3), joining each BS in a multicast group; sending device update data from the MSC to the multicast group in an IP multicast message (column 8, lines 56-61 discloses the MSC receives the IP multicast information from data network 118

and then forwards the multicast to base station 104. Maggenti discloses in column 5, lines 40-45 the any device can join a multicast group by generating a request and sending it over the local network to the local router in the MSC. Since the base stations do send requests to the MSC as disclosed in column 8, lines 29-31, each base station must join the multicast group in order to receive the multicast message from the MSC; see col 7, lines 66-67 and col 8, lines 1-25 and 53-65).

Regarding **claims 2, 22, and 25**, with the features of parent claims 1, 21, and 24 addressed above, respectively, Maggenti discloses wherein the step of sending device update data from the MSC to the BS in an IP message includes sending the device update data in an IP multicast message, and the method further comprises, prior to assigning the BS an IP address, the step of joining the BS in a multicast group (**column 8, lines 56-61 discloses the MSC receives the IP multicast information from data network 118 and then forwards the multicast to base station 104. Column 8, lines 22-25 discloses a request to join a particular multicast group. This request is later sent by the base station and forwarded to the MSC 102).**

Regarding **claims 3 and 15**, with the features of parent claims 2 and 14 addressed above, respectively, Maggenti discloses where the step of sending device update data from the MSC to the BS in an IP message includes sending the device data to a multicast group address that comprises a multicast group designation, a device data type for the device update data, and a Base Station Identification (BSID). Maggenti

further discloses including determining at each of the devices if the update data is directed thereto **(column 10, lines 7-16 discloses the indication can be generated by base station 104 by creating a message using the information contained within the request, such as an identification of the multicast group to which membership is sought. The indication is then created, comprising the identified multicast group. Other information may be included in the indication, such as the time the request, or the indication was generated, an identification of the WCD sending the request, and/or a location of the requesting WCD such as base station that the requesting WCD is operating. The location of the base station indicates its identification. The data type is understood to be included since it is a request of a specific task. Maggenti also discloses the indication can be generated at MSC 102).**

Regarding **claim 4** with the features of parent claim 3 addressed above, Maggenti discloses wherein the step of sending the device data to a multicast group address includes sending the device data to a multicast group address that includes a BSID that indicates that the update is applicable to a plurality of BSs in the network **(column 10, lines 7-16 discloses that information may be included in the indication, such as the time the request, or the indication, was generated, an identification of the WCD sending the request, and/or a location of the requesting WCD such as base station that the requesting WCD is operating).**

Regarding **claims 5 and 16**, with the features of parent claims 4 and 15 addressed above, respectively, Maggenti discloses where the step of sending the

device data to a multicast group address that includes a BSID that indicates that the update is applicable to a plurality of BSs in the network includes sending the device data to a multicast group address that includes a BSID that indicates that the update is applicable to all BSs in the MSC's exchange. Maggenti further discloses including simultaneously updating the plurality of devices by the base station (**column 19, lines 3-10 discloses that when a wireless device requests a multicast group, the request is provided to only the subset of wireless devices are included in the multicast group. This means that if all base stations make requests to the MSC for that multicast group, the multicast group address must accommodate all applicable base stations. Column 8, lines 56-61 discloses that after the base station 104 receives the IP multicast from the MSC it forwards the data to all wireless communication devices).**

Regarding **claim 6** with the features of parent claim 2 addressed above, Maggenti discloses where the step of joining the BS in a multicast group includes the step of joining the BS in a plurality of multicast groups, each of said multicast groups receiving a different type of device update data (**column 11, lines 8-16 discloses wireless communication device sending (WCD) a membership report to base station 104 indicating all multicast groups to which it currently belongs. The membership report also includes any additional multicast groups that the WCD would like to join. The base station forwards the membership report to MSC 102, meaning it will accept all multicast groups that its WCDs belong to).**

Regarding **claim 7** with the features of parent claim 6 addressed above, Maggenti discloses wherein the step of joining the BS in a plurality of multicast groups includes the steps of: joining the BS in a first multicast group that receives device update data for Digital Control Channels (DCCHs); and joining the BS in a second multicast group that receives device update data for Digital Traffic Channels (DTCs) **(column 8, lines 22-26 discloses the request to join a particular multicast group may be transmitted on a shared access channel, a dedicated traffic channel, a control channel, an SMS channel).**

Regarding **claim 8** with the features of parent claim 1 addressed above, Maggenti discloses where before the step of simultaneously updating the plurality of devices by the BS, the step of determining whether the devices are to be updated immediately or at a specified time **(column 11, lines 18-25 discloses that base station 104 does not immediately send the first membership report to other WCDs. The base station 104 waits until at least one other membership report (a second membership report) is received from a second WCD operating in the same geographic region as the first WCD. In another embodiment, base station 104 waits until at least a second membership report is received from a WCD operating in the same base station coverage area as the first WCD).**

Regarding **claim 9** with the features of parent claim 1 addressed above, Maggenti discloses where the step of simultaneously updating the plurality of devices by the BS includes the steps of determining whether the device update data is directed to a single device in the BS or a plurality of devices in the BS, and simultaneously updating

the plurality of devices upon determining that the device update data is directed to a plurality of devices in the BS (**column 9, lines 1830 discloses WCD requests addition to a particular multicast group is forwarded to all, or a subset of all WCDs within the coverage area of the base station receiving the request. For example, if WCD 306 sends a request to base station 104 to receive a specific multicast, base station 104 will forward the request to the MSC and will also provide an indication of the request to all, or a subset of all WCDs within the coverage area of base station 104. If another WCD operating within the coverage area of base station 104 wishes to join the same multicast group, there is no need to transmit a request. This indicates if a single device or plurality of devices belonging to a BS requires update data).**

Regarding **claim 10**, with the features of parent claim 1 addressed above, Maggenti discloses where the step of sending device update data from the MSC to the BS in an IP message includes sending the device update data in an IP broadcast message (**column 8, lines 60-65 discloses the multicast information is provided to all wireless communication devices (WCD) within the coverage area using a broadcast channel).**

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11-13, 23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti in view of Harsch (US 6,212,175).

Regarding **claims 11 and 23** with the features of parent claims 10 and 21 addressed above, respectively, Maggenti discloses the use of broadcasting (**column 8, lines 60-65 discloses the multicast information is provided to all wireless communication devices (WCD) within the coverage area using a broadcast channel**).

Maggenti fails to expressly disclose the step of assigning the BS to monitor a User Datagram Protocol (UDP) port for device update data.

Harsch, however, discloses a wireless network communications system that includes the step of assigning the BS to monitor a User Datagram Protocol (UDP) port for device update data ("**Used in conjunction with the IP may be a User Datagram Protocol (UDP)**", **column 2, lines 27-30**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Maggenti's apparatus to have the feature of assigning the base station to monitor a User Datagram Protocol port for device update data, as taught by Harsch. The motivation is a system that allows for distinguishing messages among multiple destinations, as disclosed by Harsch on column 2, lines 30-32.

Regarding **claims 12 and 13**, with the features of parent claim 11 addressed above, Maggenti further discloses the step of assigning the BS to monitor a UDP port

for device update data includes the steps of assigning the BS to monitor a first UDP port for a first type of device update data, and assigning the BS to monitor a second UDP port for a second type of device update data. The BS is assigned to monitor a third UDP port for device update data of the first type that is directed to a plurality of BSs in the network, and the BS is further assigned to monitor a fourth UDP port for device update data of the second type that is directed to a plurality of BSs in the network **(column 11, lines 8-16 of Maggenti discloses wireless communication device sending (WCD) a membership report to base station 104 indicating all multicast groups to which it currently belongs. The membership report also includes any additional multicast groups that the WCD would like to join. The base station forwards the membership report to MSC 102, meaning it will accept all multicast groups that its WCDs belong to. Maggenti, as modified, uses a UDP port for each type of device update data).**

Regarding **claim 26** with the features of parent claim 24 addressed above, Maggenti further discloses where the BS includes at least one User Datagram Protocol (UDP) port for monitoring IP broadcast messages, and the step of sending device update data from the MSC to each of the plurality of devices in an IP message includes sending the device update data in an IP broadcast message **(column 8, lines 60-65 discloses the multicast information is provided to all wireless communication devices (WCD) within the coverage area using a broadcast channel).**

Response to Arguments

6. Applicant's answers (10 May 2004) regarding claims 1, 21, and 24 rejected under 35 USC 102 have been fully considered but are not persuasive. Regarding **claims 1, 21, and 24**, Applicant argues that the Maggenti reference (US 6,633,765) fails to disclose that the base station is in an IP network, and further fails to show that the base station can deploy one or more devices comprising radio network data. Furthermore, Applicant states that the IP addresses are assigned to end addresses and not the base stations. The Examiner respectfully disagrees. The prior art of Maggenti still reads on the limitations of claims 1, 21, and 24. For example, referring to col 7, lines 66-67 and col 8, lines 1-25 and 53-65, Maggenti discloses that base station 104 communicates to multiple end points 306, 308, 310, and 312 (WCDs in Figure 3) within its coverage area and the MSC 102 through IP data packets. Maggenti further discloses WCDs 306 are assigned an IP address for communication with base station 104 and MSC 102. Therefore, base station 104 must have an IP address in order to communicate with the WCDs 306 and MSC 102. Furthermore IP multicast information is provided to base station 104 by the MSC 102, which is then forwarded to one or more WCDs 306. This IP multicast information is considered as an IP message. Referring to column 4 lines 46-66, Maggenti discloses an example of using IP multicast as a way to transmit sports scores updates. The disclosure in the Maggenti reference explained above still reads on claims 1, 21, and 24. It is concluded that the Maggenti reference in its entirety anticipates claims 1-10, 14-16, 21, 22, 24, and 25, and in combination with the other references continue to read on the claimed subject matter through obviousness. Therefore the claims are not allowed over the prior art.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Nguyen whose telephone number is 703-305-0369. The examiner can normally be reached on 9am-6pm ET, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AVN

July 12, 2004



JOHN PEZZLO
PRIMARY EXAMINER